Kannegiesser Laundry Technology



Washing

Garment Processing

Extracting

Workwear

Drying

Flatwork Processing Technical Support



Kannegiesser Feeding Technology



Overview

Flatwork Finishing Technology

Feeder	Ironer	Folder
PickUp PU12 (Separating Machine) loaded by bag, cart or gripping articles out of carts	High Power Ironer HPM 12 with Heating Band Technology diameter 48"	Compact Lengthf. Machine CFI with up to 3 lengthfolds
HighSpeed Standard GEM-ST HighSpeed Superst. GEM-S - capacity up to 1200 pcs/h - 2 or 4 feeding stations	High Capacity Ironer Setra diameter 32", 40", 52"	Foldmaster Compact CFM with up to 3 lengthfolds (by airblast) and 3 crossfolds (by blade and blade/reversing belts)
Duotex MEM 01/01+2 - capacity up to 850 pcs/h - 2 feeding stations		Collect and Store C&S
		Small Piece Folder and Stacker MKF MKF Basic





PU 12: Function



Sensor-conntrolled gripper takes out an item



Item gets clamped



Conveyor belt moves against pressure roller and pulls out the item



PU 12



capacity: 1200 pcs/h

max. load: 165 lb



PU 12 Loading

- Loading by:
- tilting storage chute, loaded by bags or belts
- direct unloading from the cart with double gripper

- Optimum Linen Separation in an ergonomic work position
- High Performance due to short work ways
- Careful breaking of the load the item is pulled out of the batch between pressure roller and conveyor belt
- Low Space Requirements



HighSpeed GEM

High capacity feeder for large items up to 1200 pcs/h
patented measuring system for width detection
small items fed directly on belts
2 or 4 feeding stations
working width: 98'', 106'', 118'', 138'', 158''



Comparison GEM-ST GEM-S





Spreading Technology



- Clamping of 2 corners
- Measuring device moves through the item
- First clamp starts
- Spreading width is calculated
- Second clamp starts (with own drive)
- Exact and quick positioning at the centre of lane
- Careful, defined spreading
- Depositing of the item
- Clamps return to loading positions



Spreading Technology: Measuring System



a: known

b: distance clamp 1 + clamp distance

c²=a²+b²



Spreading Technology: Operation Modes

1-lane Operation





2-lane Operation



Spreading Technology: Operation Modes



2-lane synchronous feeding (optional)

- High Performance by synchronous depositing of 2 items
- Optimal ironer utilization



Spreading Technology: Operation Modes



 automatic 1- and 2- lane operation (optional) corresponding to measured width



Mixed items can be fed without prior

sorting in 1- and 2- lane operation



Spreading Technology: Clamp Drive



Round Profile and large rollers

separate drive for each clamp in operation controlled by frequency inverter

Maintenance-free gear drive

No wear and tear for couplings due to changing the gear in neutral

Automatic clamp start (optional) Single driven clamps





Spreading Technology

- Principle: "First measuring, then spreading"
 - Gentle to fabric, as both clamps are motor driven and second clamp does not tear the item
 - Gentle to fabric due to pre-determined final spreading point
 - Short cycles, as clamps can be driven with maximum speed to final stopping point
 - High availability of clamps due to separate drive for each clamp
 - Labor saving due to automatic 1-/2-lane operation
 - Increased flexible due to many operational modes for large and small items



Spreading Technology

- Clamp Drive
 - Gentle to fabric; exact control of clamps by frequency controlled drive
 - Short cycles; optimum speed and braking of the clamps by frequency controlled drive
 - High Availability low maintenance belt drive and wear and tear free coupling
 - High Availability rounded pair profile large rollers



Depositing: oversized clamps

- Clamps enable a positive
 - ergonomic feeding
- High moving speed ensures clamp availability
- Fully automatic, straight
 - depositing



- Careful spreading even with thin fabrics
- No idle time for operators
- High quality and consistency by automatic depositing



Depositing: vacuum transfer bar

- strong, programcontrolled vacuum in feeding area
- air blast assisted depositing onto vacuum transfer bar
- effective adhesive coating of transfer bar
- extremely high acceleration of the bar enables short cycles



- absolute straight edge depositing
- further improvement of clamp availability



Depositing: leading edge clamping device

- Program-controlled clamping bar ensures quality for bed covers (hotel use), by pressing it against the transfer bar
- Prevents seam to "turn over"



 Increase in Quality; especially for hotel linen

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Depositing: Table Vacuum



- Perforated, gripping belts in the depositing area
- Strong vacuum zone
- Highly efficient vacuum by oversized radial fans
 - Safe deposit and transport of heavy laundry pieces at high speeds
 - Simple depositing for manual feeding



Movable Head

- Pneumatic lifting of the spreading head
- Lowering of the feeding table (HighSpeed GEM-S/AS)



- Small pieces can be fed manually onto tilted belts
- Optimum ergonomic feeding height by lowering the table (HighSpeed GEM-S/AS)



Depositing: Start-Stop Device for manual feeding (optional)



 Feeding Table Belts e stop automatically as long as the operator feeds the item on the belt.

 Quality improvement for manual feeding



Vacuum chute



Vacuum chute



- Excellent shaking-outeffect for sheets and bed covers by strong continuous air jet
- Stretching of the item lengthways by spreading device
- Increase of the shaking out effect (Optional flap)
- Oversized radial fan



Spreading brushes

- Brushes operating directly underneath table vacuum
- Smooth nylon brushes take out the creases crossways to running direction
- Brushes are designed for multi-lane operation



 Consistent high quality through overlapping brushes



Processing: Upper Brushes (optional)

- Upper brushes ensure flattening of seams
- available as option for model MEM 01+2 in 1and 2-lane operation





Consistent Quality



Function of stretching conveyor*

- Table belts hold the item (belt stop), while transport and sandwich belts are moving
- Result: exact processing of leading edge



 Important increase in quality with constant high performance



Integrated Operation Panel - IBT basic

- Microprocessor-controlled PC-unit with access to complete operation parameter
- Screen displaying clear text of operation-related data (program number, customer name, classification, etc.)
- Menu-controlled user guidance
- High flexibility through easy program dial-up
- High availability by fast fault finding on screen





Duotex MEM

- High quality feeder for wide range of articles
- capacity of large items up to 850 pcs/h
- patented automatic measuring system for width detection
- small items fed on feeder belts
- 2 feeding stations
- working width: 98", 106", 118", 138"



Clamps

clamps are specialy designed to facilitate the depositing of high quality table linen







Lifting bar and Start-Stop



Start-Stop same as with GEM-S

rotating lifting bar to support articles
reducing weight on clamps, while item is deposited onto the vacuum bar



Duotex MEM

- Basically identical features as HighSpeed GEM-S
- Measuring system same as GEM
- Clampdrive same as MEM (except: 2 motors <u>only</u>)
- Table vacuum
- Movable rotating head
- Vacuum chute
- Stretching conveyor





Standard Features on GEM and MEM

- automatic speed adaption to ironer
- rotating spreading head to allow small piece feeding on perforated feed conveyor
- oversized vacuum on the feeding table
- oversized vacuum chute with controlled vacuum and feed roller (vacuum bar with HighSpeed GEM-ST)
- smoothing brushes between chute and table
- patented measuring system to detect spreading width of item
- AC frequency drive
- vacuum transfer bar with special coating
- high friction perforated belts
- separate stretching conveyor (not with GEM-ST)
- sandwich conveyor (not with GEM-ST)
- IBT Basic
- caster mounted



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